

## **Product datasheet for TA504351S**

### OriGene Technologies, Inc.

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# Calpastatin (CAST) Mouse Monoclonal Antibody [Clone ID: OTI1E7]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI1E7

**Applications:** FC, IHC, WB

Recommended Dilution: WB 1:2000, IHC 1:150, FLOW 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human CAST(NP\_001741) produced in HEK293T

cel

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.62 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 84.8 kDa

Gene Name: calpastatin

Database Link: NP 001741

Entrez Gene 831 Human

P20810

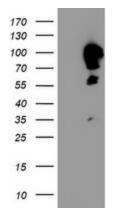


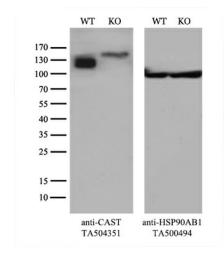
#### Background:

The protein encoded by this gene is an endogenous calpain (calcium-dependent cysteine protease) inhibitor. It consists of an N-terminal domain L and four repetitive calpain-inhibition domains (domains 1-4), and it is involved in the proteolysis of amyloid precursor protein. The calpain/calpastatin system is involved in numerous membrane fusion events, such as neural vesicle exocytosis and platelet and red-cell aggregation. The encoded protein is also thought to affect the expression levels of genes encoding structural or regulatory proteins. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq]

Synonyms: BS-17; PLACK

# **Product images:**





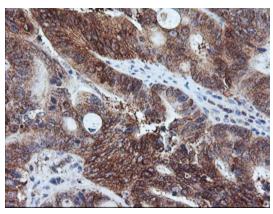
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CAST (Cat# [RC211776], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CAST (Cat# [TA504351]). Positive lysates [LY400663] (100ug) and [LC400663] (20ug) can be purchased separately from OriGene.

Equivalent amounts of cell lysates (10 ug per lane) of wild-type Hela cells (WT, Cat# LC810HELA) and CAST-Knockout Hela cells (KO, Cat# [LC810027]) were separated by SDS-PAGE and immunoblotted with anti-CAST monoclonal antibody [TA504351], (1:500). Then the blotted membrane was stripped and reprobed with anti-HSP90AB1 antibody ([TA500494]) as a loading control.

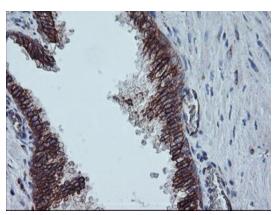




Immunohistochemical staining of paraffinembedded Human colon tissue within the normal limits using anti-CAST mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA504351])

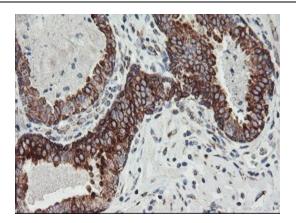


Immunohistochemical staining of paraffinembedded Carcinoma of Human pancreas tissue using anti-CAST mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA504351])

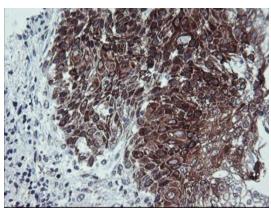


Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-CAST mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA504351])

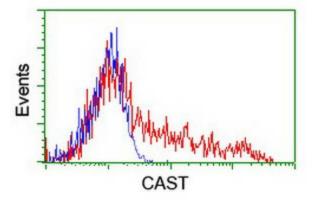




Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-CAST mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA504351])



Immunohistochemical staining of paraffinembedded Carcinoma of Human bladder tissue using anti-CAST mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA504351])



HEK293T cells transfected with either [RC211776] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-CAST antibody ([TA504351]), and then analyzed by flow cytometry.